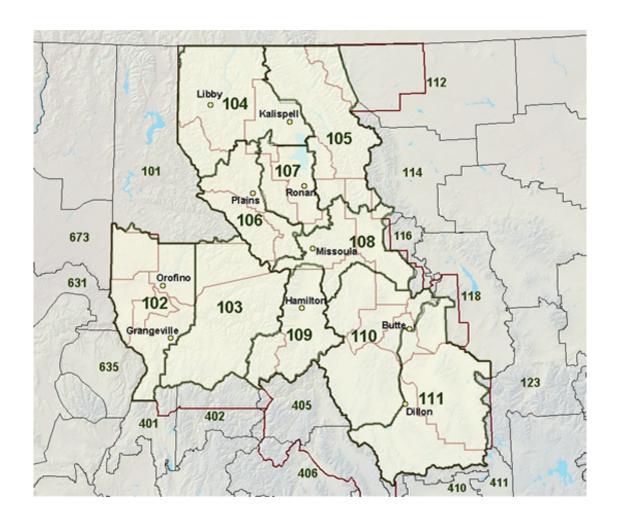
# MISSOULA FIRE WEATHER 2006



### 2006 CHANGES TO THE MISSOULA ANNUAL FIRE WEATHER OPERATING PLAN

Following are changes to Missoula's section of the National Weather Service Northern Rockies Annual Fire Weather Operating Plan.

 Temperature and Relative Humidity Trends have been removed from the Fire Weather Planning Forecast.

### **MISSOULA FIRE WEATHER - 2006**

#### Location

The National Weather Service Office in Missoula is located at the Aerial Fire Depot, 6633 Aviation Way, 1/4 mile west of the Missoula International Airport. The mailing address is:

National Weather Service 6633 Aviation Way Missoula, MT 59808

### **Phone Numbers**

Fire Weather desk: (406) 329-4716

• Office: (406) 329-4715/4840

• FAX: (406) 329-4842

### **Contacts**

Administrative	IMETs				
Bruce Bauck Meteorologist in Charge bruce.bauck@noaa.gov	Bob Nester Incident Meteorologist robert.nester@noaa.gov				
Marty Whitmore Fire Wx Program Manager marty.whitmore@noaa.gov	Patrick Gilchrist Incident Meteorologist Trainee patrick.gilchrist@noaa.gov				
Crystal Lake Fire Weather Assistant crystal.lake@noaa.gov	Andrew Church Incident Meteorologist Trainee andrew.church@noaa.gov				

#### **Internet Address**

http://weather.gov/missoula

#### **Operational Hours**

• Twenty-four hour service is provided for routine and special fire weather products.

#### TRAINING PROVIDED

Missoula Fire Weather Forecasters are available for training courses, workshops, seminars and other meetings requiring meteorological expertise. Training includes local and Regional courses such as S-290 and S-390, as well as pre-season refreshers for Hotshot crews, Smokejumpers, general firefighters, lookout personnel, etc. Per diem and travel costs will be paid for by the requesting agency, as outlined in the <a href="National Agreement for Meteorological Services">National Agreement for Meteorological Services</a>. Please give as much advance notification as possible to ensure the availability of a forecaster.

All Training Requests should go through the Fire Weather Program Manager, Marty Whitmore.

e-mail <u>Marty.Whitmore@noaa.gov</u> and cc: <u>Crystal.Lake@noaa.gov</u>

or phone 406-329-4715

#### **AGENCIES SERVED**

The National Weather Service Office in Missoula provides fire weather services to agencies in northwest Montana and west central Idaho. Agencies served include:

USDA Forest Service Region 1	Lolo NF, Kootenai NF, Flathead NF, Beaverhead/Deerlodge NF, Clearwater / Nezperce NF, Bitterroot NF, Northern Rockies Coordination Center (NRCC)
Bureau of Land Management	BLM-Idaho, BLM-Montana
Bureau of Indain Affairs	Nez Perce Tribe of Idaho, Confederated Salish and Kootenai Tribe
Fish & Wildlife Service	FWS-Montana, FWS-Idaho
National Park Service	Glacier NP
State of Montana	Department of Natural Resources and Conservation
Counties (Montana)	Beaverhead, Deer Lodge, Flathead, Granite, Lake, Lincoln, Mineral, Missoula, Powell, Ravalli, Sanders, Silverbow, Glacier, Madison, Jefferson
State of Idaho	Idaho Department of Lands
Counties (Idaho)	Clearwater, Idaho, Lewis, Nez Perce, Latah

# **AGENCY CONTACTS**

# Western Region

Meteorological Services Division (MSD)	Name	801-524-4000	
Chief	Richard Douglas	ext. 262	
Deputy	Carl Gorski	ext. 260	
Fire Weather Program Manager	Roger Lamoni	ext. 267	

# **USFS** Forest Dispatchers

Forest	Phone
Beaverhead/Deerlodge	406-683-3975
<u>Bitterroot</u>	406-363-7133
Clearwater/ Nezperce	208-983-4060/4061
Flathead	406-758-5260
Kootenai	406-293-1586
Lolo	406-829-7070

# USFS Forest/District Fire Management Officers

Forest	City/State	Phone
Beaverhead/Deerlodge	Dillon, MT	406-683-3990
Dillon District	Dillon, MT	406-683-3969
Wiseriver/Wisdom District	Wisdom, MT	406-689-3243
Sheridan/Madison District	Ennis, MT	406-682-4253
Jefferson/Butte District	Whitehall, MT	406-287-3223
Phillipsburg/Deerlodge District	Phillipsburg, MT	406-859-3211
Bitterroot	Hamilton, MT	406-363-7135
Stevensville District	Stevensville, MT	406-777-2288/5461
Darby District	Darby, MT	406-821-4258/3913
Sula District	Sula, MT	406-821-2325/3201

West Fork District	Darby, MT	406-821-1230/3269
Clearwater/Nezperce	Grangeville, ID	208-983-4066
Clearwater NF		
Palouse District	Potlatch, ID	208-875-1131
North Fork District	Orofino, ID	208-476-4541
Lochsa District	Kooskia, ID	208-926-4274
Powell District	Powell, ID	208-942-3113
Nezperce NF		
Salmon River District	Slate Creek, ID	208-839-2211
Clearwater District	Grangeville, ID	208-983-1963
Elk City/Red River District	Elk City, ID	208-842-8952
Moose Creek District	Fenn, ID	208-926-4258
<u>Flathead</u>	Kalispell, MT	406-758-5261
Swan Lake District	Big Fork , MT	406-837-7527
Hungry Horse/Glacier View District	Hungry Horse, MT	406-387-3834
Spotted Bear District	Hungry Horse, MT	406-758-5376
Tally Lake District	Whitefish, MT	406-863-5422
<u>Kootenai</u>	Libby, MT	406-283-7733/7742
Rexford District	Eureka, MT	406-296-7173
Fortine District	Fortine, MT	406-882-8328
Three Rivers District	Troy, MT	406-295-7486
Libby District	Libby, MT	406-283-7551
Cabinet District	Trout Creek, MT	406-827-0712
<u>Lolo</u>	Missoula, MT	406-329-1089
Missoula District	Missoula, MT	406-329-3852
Ninemile District	Huson, MT	406-626-5422
Seeley Lake District	Seeley Lake, MT	406-677-3915
Superior District	Superior, MT	406-822-3952
Plains District	Plains, MT	406-826-4336

USFS R-1 Regional Office

Agency	Name	Phone
Northern Rockies Coordination Center (NRCC)		329-4880
Regional Coordinator	Kathy Elzig	329-4708
Intelligence	Colleen Finneman	329-4886
Fire, Aviation and Air Management		329-3402
Northern Rockies Operations	Bob Gilman	329-4961
Director of Fire, Aviation & Air Management	Larry Dawson	329-3402
Assistant Director of Fire, Aviation & Air Management	George Weldon	329-3296
Fire Cache	Pat Nooney	329-4932

Agency	Name	Phone	
Predictive Services			
Meteorologist	Michael Kreyenhagen	329-4703	
Meteorologist	Vacant	329-4875	
Smoke Coordinator/RAWS	Dave Grace	329-4952	

# Other Agency Fire Contacts

Agency	Name	Phone
National Interagency Fire Center (Boise)		208-387-5400
Weather Information Management System (WIMS)	Help Desk	208-387-5290
Bureau of Land Management	Phil Gill	406-896-2914
Butte Office	John Thompson	406-533-7611
Bureau of Indian Affairs	Tom Corbin	406-247-7949
	Corrie Winnie	503-231-6759
Flathead Agency	Tony Harwood	406-676-2550
Nez Perce Tribe	Sandy Holt	208-843-2827

MT Department of Natural Resources and Conservation	Ted Mead	406-542-4300	
Idaho Department of Lands	Brian Shiplett	208-765-1522	
National Park Service	Bryan Swift	303-969-2449	
Glacier Park FMO	Fred VanHorn	406-888-7822	
Yellowstone FMO	Phil Perkins	307-344-2180	
Fish and Wildlife Service	Jim Kelton	303-236-8125	
Zone FMO WY, MT, UT	Bob Rebarchik	406-329-4749	
National Bison Range	Kevin Beck	406-644-2211 x217	
MT Department of Emergency Services	Dan McGowan	406-841-3953	

#### FIRE WEATHER BRIEFINGS

NWS Missoula offers fire weather briefings at the office for local land managers, as well as a conference call with internet graphics for those managers at a distance.

Briefings will be held Mondays and Thursdays at 8:30 am MDT through spring burning season. Daily briefings will be held during the active fire season. Briefings will return to Mondays and Thursdays for fall burning, generally mid to late September. The timing and frequency, as well as start and end dates of this service, will be determined by user needs.

Briefings will include an informational package containing data such as satellite, radar, weather observations, etc. This information will be accessible to participants via NWS Missoula's internet homepage prior to each conference call.

The internet site for the Fire Weather Briefings is <a href="https://www.weather.gov/missoula/fireweatherbriefing.php">www.weather.gov/missoula/fireweatherbriefing.php</a>.

To participate in the conference call, the toll free number is 877-812-0276. Please call our office (406-329-4840) for the participant passcode.

#### **ROUTINE PRODUCT ISSUANCE TIMES**

#### **General Forecast**

April - June Morning Daily 0700

July - Morning/ Daily 0700/1500

September Afternoon

October - Mornings Daily 0700

November

Specific dates of the above timeframes will be dictated by user needs.

### **Clearing Index Graphical Product**

March - Morning Daily 0700

November

#### FIRE WEATHER PLANNING FORECAST EXAMPLE

ZCZC GTFFWFMSO FNUS55 KMSO 261254

FIRE WEATHER PLANNING FORECAST FOR WRN MONTANA AND N CNTRL IDAHO NATIONAL WEATHER SERVICE MISSOULA MT 654 AM MDT TUE APR 26 2006

...HEADLINE AS NECESSARY

DISCUSSION...THIS WOULD BE A SHORT...NON-TECHNICAL DESCRIPTION OF THE WEATHER PATTERN AND FEATURES OVER THE NEXT COUPLE DAYS. IT WILL FOCUS ON THE MAIN WEATHER CONCERNS IN THE SHORT TERM.

EXTENDED...OCCASIONALLY THE DISCUSSION MAY INCLUDE INFORMATION ON THE MEDIUM RANGE (DAYS 3-7). IN THESE CASES...A SEPARATE LABELED PARAGRAPH LIKE THIS WILL BE ADDED.

IDZ102-103-MTZ109-270015-PALOUSE/HELLS CANYON-CLEARWATER/NEZ PERCE-BITTERROOT-542 AM PDT TUE APR 26 2006 /642 AM MDT TUE APR 26 2006/

.TODAY...

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SKY/WEATHER.....PARTLY CLOUDY (40-50 PERCENT).
MAX TEMPERATURE.....69-79 VALLEYS AND 58-68 RIDGES.
MIN HUMIDITY......17-27 PERCENT VALLEYS AND 26-36 PERCENT RIDGES.
20-FOOT WINDS.....
   LOWER ELEVATION.....UPSLOPE/UPVALLEY 4-8 MPH.
   RIDGE TOP......NORTH UP TO 5 MPH.
HAINES INDEX...... 3 VERY LOW.
LAL....1.
CWR (> 0.10 INCH)...0 PERCENT.
.TONIGHT...
SKY/WEATHER......PARTLY CLOUDY (55-65 PERCENT). SLIGHT CHANCE OF
                   THUNDERSTORMS.
MIN TEMPERATURE.....37-47 VALLEYS AND 30-40 RIDGES.
MAX HUMIDITY......79-89 PERCENT.
20-FOOT WINDS.....
    LOWER ELEVATION.....NORTHEAST 5-15 MPH.
   RIDGE TOP......NORTHEAST UP TO 10 MPH.
HAINES INDEX...... 3 VERY LOW.
LAL....2.
CWR (> 0.10 INCH)...10 PERCENT.
.WEDNESDAY...
SKY/WEATHER.....PARTLY CLOUDY (55-65 PERCENT). CHANCE OF
                  SHOWERS.
MAX TEMPERATURE.....52-62 VALLEYS AND 39-49 RIDGES.
MIN HUMIDITY......29-39 PERCENT VALLEYS AND 43-53 PERCENT RIDGES.
20-FOOT WINDS.....
   LOWER ELEVATION.....EAST 10-20 MPH.
   RIDGE TOP......EAST 10-20 MPH.
HAINES INDEX.....2 VERY LOW.
LAL....1.
CWR (> 0.10 INCH)...20 PERCENT.
.THURSDAY...COOLER. PARTLY CLOUDY WITH SLIGHT CHANCE OF SNOW
SHOWERS. LOWS 29-39. HIGHS 55-65. EAST WINDS 10-20 MPH.
.FRIDAY...PARTLY CLOUDY WITH SLIGHT CHANCE OF SNOW SHOWERS. LOWS
24-34. HIGHS 52-62. EAST WINDS UP TO 10 MPH.
.SATURDAY...SLIGHT CHANCE OF SHOWERS. PARTLY CLOUDY. LOWS 24-34.
HIGHS 51-61. NORTHEAST WINDS 5-15 MPH.
.SUNDAY...PARTLY CLOUDY. LOWS 26-36. HIGHS 55-65.
.MONDAY...SLIGHT CHANCE OF SHOWERS. MOSTLY CLOUDY. LOWS 27-37.
HIGHS 58-68.
$$
Forecast for next geographical descriptor and fire weather zone
group.
$$
SHORT TERM...(Forecaster Name)
LONG TERM...(Forecaster Name)
weather.gov/missoula
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#### **RED FLAG CRITERIA**

One or more of the following conditions, in conjunction with Very High or Extreme Fire Dangers, will be considered for Red Flag events.

- 1. Scattered dry thunderstorms. (A lightning storm accompanied by less than a wetting rain, 0.10 inch precipitation or less, often with very gusty winds).
- 2. Increased thunderstorm activity, wet or dry, during an extremely dry period.
- 3. A combination of low RH's and increasing strong or gusty surface winds, or abrupt increase in winds and change in direction due to the approach and passage of a cold front, squall line, or other weather phenomena other than isolated thunderstorms. See the Red Flag Decision Chart below.
- 4. Anytime the forecaster foresees a change in weather that would result in a significant increase in fire danger.

#### RED FLAG DECISION CHART

Missoula's Fire Weather Forecasters utilize a Red Flag Decision Chart as a "first look" at the need for a Red Flag Warning, based on increasing wind and low RH. Typically Red Flag Warnings are issued when fire danger is rated "VERY HIGH" or greater. However, there may be exceptions. This chart is by no means an absolute.

Winds are sustained 10-minute average (RAWS).

# **RED FLAG DECISION CHART**

# RELATIVE HUMIDITY

40% 35% 30% 25% 20% 15% 10% 5%



Poss = Possible Prob = Probable Forecast Zone Descriptions

#### FORECAST ZONE DESCRIPTIONS

#### ZONE 102: PALOUSE/NEZ PERCE RESERVATION/HELL'S CANYON REGION

The northern boundary follows the southern portion of the Coeur d'Alene Indian Reservation and the Latah/Clearwater County lines. The eastern boundary originates at the intersection of the Little North Fork of the Clearwater (near the Clearwater County line) and the Clearwater/Nezperce National Forest boundary and runs south along the Forest boundary past Grangeville to the main Salmon River at Island Bar and continues south and west along the Idaho County border. The western boundary runs along the Snake River from the Coeur d'Alene Reservation to the Adams County line.

#### **ZONE 103: CLEARWATER/NEZ PERCE NATIONAL FOREST**

This zone encompasses the entire combined Clearwater and Nezperce National Forests as well as the Gospel Hump and portions of the Selway Bitterroot Wilderness. Also included is the Floodwood State Forest in the vicinity of the Little North Fork of the Clearwater at the northern border of Clearwater County.

#### **ZONE 104: KOOTENAI NATIONAL FOREST/TALLEY LAKE DISTRICT (FNF)**

The western and northern boundaries follow political lines along the Idaho-Montana and Canadian borders. The eastern boundary follows the Kootenai National Forest boundary south to route 93 to the Flathead National Forest boundary, north of Whitefish, east of Columbia Falls and heading south along the Forest boundary to the Lake County line. The southern boundary follows the Lake County line and Flathead National Forest boundary to the intersection of route 2 which continues south along Forest boundaries to the State border. The State protected lands on the Fisher River District are also included within this zone.

# ZONE FLATHEAD NATIONAL FOREST/GLACIER PARK/BOB MARSHALL AND MISSION MOUNTAIN 105: WILDERNESS

This zone starts at the intersection of the Kootenai/Flathead National Forests at the Canadian border running east and including Glacier National Park. The eastern boundary follows the Park border and intersects with the Continental Divide and runs south to the Flathead National Forest boundary. The southern boundary borders the Bob Marshall and Mission Mountain Wilderness lines. The western boundary follows the Mission Mountains and Swan range along the Forest boundary to north of Whitefish and west to route 93 to the Kootenai/Flathead National Forest boundary. This zone includes the Stillwater State Forest.

#### **ZONE 106: WESTERN LOLO NATIONAL FOREST**

This zone includes the Nine Mile, Superior, Plains/Thompson Falls and western portions of the Missoula District on the Lolo National Forest. It is bounded by the Idaho-Montana border (Bitterroot Mountains) and extends northeast along the Kootenai/Lolo National Forest boundary. Moving south, this zone follows the Salish & Kootenai Indian Reservation and Lolo National Forest interface to west of Evaro tracing the Forest boundary to Huson. Crossing I-90, this zone continues south along the Forest boundary until the intersection of route 12 and continues southwestward to the State border.

#### **ZONE 107: SALISH & KOOTENAI INDIAN RESERVATION**

This zone is bounded by the Lolo National Forest on the west and south and the Flathead National Forest on the east and north.

#### ZONE 108: EASTERN LOLO NATIONAL FOREST /WELCOME CREEK AND SCAPEGOAT WILDERNESSES

This zone includes all of the Lolo National Forest east of Missoula and south of route 12, up to the Bitterroot National Forest boundary. It also contains the Scapegoat and most of the Welcome Creek Wildernesses. The eastern boundary starts at the tri-section of the Bob Marshall Wilderness, Continental Divide and Scapegoat Wilderness and continues southeast to the Wilderness/Lincoln District boundary. This line continues south along the Helena National Forest boundary to the intersection with the Deerlodge/Beaverhead National Forest. The southern boundary runs west from this boundary to Deer Lodge then north along Interstate 90 to the intersection with the Philipsburg District line. State protection areas include Missoula, Clearwater, Garrison, and Anaconda.

#### **ZONE 109: BITTERROOT NATIONAL FOREST**

This zone includes the entire Bitterroot National Forest (in both Idaho and Montana) as well as the Frank Church River of No Return Wilderness and portions of the Selway-Bitterroot Wilderness. The Stevensville District represents the northern boundary for this zone which is approximately along the Ravalli County line.

#### **ZONE 110: DEERLODGE/ WESTERN BEAVERHEAD NATIONAL FOREST**

The western boundary runs between Lemhi Pass northward along the Idaho-Montana border to the intersection of the Ravalli and Beaverhead County lines. This boundary continues along the Forest boundary via the Anaconda-Pintlar range and Sapphire Divide past Skalkaho Pass and across Rock Creek into the Welcome Creek Wilderness. This boundary cuts north across the John Long Mountains and intersects with Interstate 90. This zone includes the easternmost section of this wilderness area (Lolo National Forest) which is managed by the Philipsburg District. The northern border follows Interstate 90 to Deerlodge, cuts east and runs along the Forest boundary, across the divide, and intersects with Interstate 15. The eastern boundary runs southerly and follows Interstate 15 through Butte and Dillon then along Route 41 to Clark Canyon Reservoir. The southern boundary extends west along Horse Prairie Creek to Lemhi Pass.

#### **ZONE 111: EASTERN BEAVERHEAD NATIONAL FOREST**

The southern boundary follows the Idaho-Montana border from Lemhi Pass along the Continental Divide (Centennial Mountains included) to Reynolds Pass. The eastern zone line continues along the Beaverhead/Gallatin National Forest boundary to north of Ennis where the Gallatin boundary intersects the Madison County line. The zone then follows the Madison County line to east of Whitehall and along the Deerlodge/Helena Forest boundary until Interstate 15 is intersected. The west boundary is identical to the east boundary of the Deerlodge/western Beaverhead National Forest zone.

# **WEATHER STATIONS**

Zone	Station	WIMS #	County	Lat	Long	Elev	Site	Aspect	NFDRS
102	<u>Palouse</u>	100603	Latah	46:98	116:98	2500	Valley	Flat	X
102	<u>Dent</u>	100714	Clearwater	46:62	116:22	1700	Valley	S	X
102	<u>Pierce</u>	100711	Clearwater	46:50	115:83	3085	Valley	Е	X
102	Slate Creek	101037	Idaho	45:63	11628	1568	Valley	W	X
102	Pittsburg Lndg	101100	Idaho	45:63	116:46	1150	Valley	Е	X
102	Shock	100606	Latah	46:98	116:63	3360	Ridge	S	X
102	<u>Rudo</u>	109796	Clearwater	46:50	115:99	2386			
103	Kelly Creek	100708	Clearwater	46:66	115:16	2737	Valley	S	X
103	<u>Eagle</u>		Clearwater	46:80	115:54	5700			
103	Powell	101031	Idaho	46:51	114:69	3409	Valley	S	X
103	<u>Fenn</u>	101013	Idaho	46:06	115:53	1520	Valley	SW	X
103	Moose Creek	101028	Idaho	46:07	114:55	2460	Valley	Flat	X
103	Red River	101045	Idaho	45:71	115:33	4600	Slope	S	X
103	Tess Portable	100791	Idaho	45:60	116:13	4700	Valley	Flat	
104	Libby	240107	Lincoln	48:38	115:57	2070	Valley	Flat	X
104	<u>Eureka</u>	240110	Lincoln	48:90	115:02	2532	Valley	Flat	X
104	Troy	240112	Lincoln	48:47	115:92	1950	Valley	Flat	X
104	BC Baldy	240119	Lincoln	48:63	115:58	4300	Slope	SW	Х
104	Trout Creek	241210	Sanders	47:87	115:62	2350	Valley	Flat	X
104	Boorman	240226	Flathead	48.13	114.72	3963	Valley	Flat	X
104	Fisher*	240118	Lincoln	48.35	115.32	2160	Valley	S	X
104	<u>Yaak</u>	240120	Lincoln	48:92	115:66	3000	Valley	Flat	X
105	Spotted Br RS	240214	Flathead	47:92	113:52	3725	Valley	S	X
105	Hungry Horse	240217	Flathead	48:38	114:06	3225	Valley	S	X
105	Cyclone	240223	Flathead	48:72	114:34	5300	Ridge	N	Х
105	Condon WC	241502	Missoula	47:54	113:72	3684	Slope	S	Х
105	Fielding	240225	Flathead	48:28	113:44	4599	Valley	Flat	
105	Spotted Bear LO	240213	Flathead	47:90	113:43	7200	Ridge	W	Х
112	Deep Creek	240308	Glacier	48:36	113:12	5431	Ridge	S	
105	St. Mary	240303	Glacier	48:73	113:43	4600	Valley	Flat	X
105	West Glacier	240207	Flathead	48:51	113:99	3200	Valley	Flat	X
105	<u>Polebridge</u>	240210	Flathead	48:78	114:28	3551	Valley	Flat	Х

Zone	Station	WIMS #	County	Lat	Long	Elev	Site	Aspect	NFDRS
105	<u>Stillwater</u>	240221	Flathead	48:54	114:56	3119	Ridge	S	X
106	Lolo Portable 1	241599	Mineral	47.93	114.04	6080			
106	Thompson F	241209	Sanders	47:58	115:28	2565	Valley	S	X
106	St. Regis	241302	Mineral	47:31	115:11	2680	Valley	S	X
106	Nine Mile	241507	Missoula	47:07	114:40	3300	Valley	SW	X
106	<u>Pardee</u>	241308	Mineral	47:27	114:92	4367	Slope	SW	X
106	<u>Plains</u>	241206	Sanders	47:71	115:26	2510	Valley	S	X
107	Hot Springs	241211	Sanders	47:61	114:66	2880	Valley	SW	X
107	<u>Jette</u>	241404	Lake	47:76	114:23	3600	Slope	Flat	X
107	<u>Ronan</u>	241403	Lake	47:88	11:417	3061	Valley	Flat	
108	Seeley Lake	241508	Missoula	47:18	113:45	4235	Valley	W	X
108	<u>Missoula</u>	241513	Missoula	46:85	114:05	3200	Valley	Flat	X
108	<u>Stinkwater</u>	241518	Missoula	46:85	113:39	5420	Ridge	NE	X
108	Point Six	241519	Missoula	47:04	113:98	7400	Ridge	S	X
108	Garrison*	243108	Powell	46.54	112.74	4520	Slope	E	X
108	Saddle Mtn*	243104	Powell	46.68	113.01	6814	Ridge	Flat	X
108	Clearwater*	241517	Missoula	47.01	113.33	3900	Valley	S	X
109	Hells Half	101019	Ravalli	45:65	114:63	8116	Ridge	SW	X
109	Deer Mtn	242902	Ravalli	46:03	114:06	7283	Ridge	S	X
109	<u>Gird</u>	242911	Ravalli	46:19	113:92	6950	Slope	S	X
109	West Fork	242907	Ravalli	45:82	114:26	4390	Ridge	SW	X
109	Tepee Point	242910	Ravalli	45:93	113:74	6629	Ridge	SW	X
109	Stevensville	242904	Ravalli	46:51	114:09	3365	Valley	SW	X
109	Little Rock Cr	242914	Ravalli	46:04	114:26	5507	Slope	Е	X
109	Smith Creek	242912	Ravalli	46:44	114:23	5650	Slope	SE	X
109	Darby*	242901	Ravalli	46.03	114.17	3887	Valley	SW	X
110	Anaconda*	244402	Deer Lodge	46.10	113.10	6000	Valley	Flat	Х
110	Phillipsburg	243002	Granite	46:32	113:30	5280	Slope	W	X
110	Wise River	245405	Beaverhead	45:78	112:93	5704	Slope	N	X
111	<u>Brenner</u>	245409	Beaverhead	44:96	113:21	6350	Slope	Flat	X
111	Red Rock	245410	Beaverhead	44:68	111:83	6690	Valley	SW	X
111	<u>Antelope</u>	245412	Beaverhead	44:68	112:54	6070	Ridge	NE	X
111	<u>Ennis</u>	245501	Madison	45:12	111:26	4939	Valley	Flat	X

Zone	Station	WIMS#	County	Lat	Long	Elev	Site	Aspect	NFDRS
111	Jefferson/Whitehall	243204	Jefferson	45:53	112:09	4360	Valley	Flat	X
111	<u>Galena</u>	243206	Jefferson	46:22	112:22	6600	Ridge	Flat	X
	FireLab Ptbl			46.64	114.85	7318			

Denotes once-a-day observations

# FIRE WEATHER DISTRICT

The Missoula Fire Weather District includes zones 102 through 111 in north-central Idaho and western Montana. See map below.

